

Message

From: Clark, Richard (MPCA) [richard.clark@state.mn.us]
Sent: 4/2/2014 1:05:02 PM
To: McKim, Krista [mckim.krista@epa.gov]
CC: Robin, Jim (MPCA) [jim.robin@state.mn.us]; Carlson, Erik (MPCA) [Erik.Carlson@state.mn.us]
Subject: RE: Cliffs Erie Parameters of Concern write-up
Attachments: 1a-CLIFFS ERIE POC npdes comments (040214).docx; 0a-PolyMet (CE) TB Data (all SW, GW) (2004-2013).xlsx; 000-CE WQ Data.xlsx

Hi Krista,

Attached are my 'margin responses' to your margin comments on the POC write-up - which also includes some revisions to the write-up itself in response to your comments. Please consider these in combination with the spreadsheet I sent yesterday as well as the original spreadsheet sent previously (both re-attached here).

Please contact me with any questions.

Thanks.

Richard
 651-757-2280

From: McKim, Krista [mailto:mckim.krista@epa.gov]
Sent: Monday, March 31, 2014 3:21 PM
To: Clark, Richard (MPCA)
Cc: Ackerman, Mark
Subject: RE: Cliffs Erie Parameters of Concern write-up

Hi Richard,

Attached are our margin comments on the writeup. I hope this helps to clarify our concerns.

Regarding the Embarrass river data, I was trying to ask you if you had looked generally at Embarrass River data in your analysis. Specifically I noticed that AI is not only higher in the Embarrass vs the tribs, but also that there appears to be an increasing trend in concentration with downstream location going from PM 12 to PM 13. This trend may not be exclusive to AI - have you evaluated Embarrass river data in your work to determine the parameters of concern?

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From: Clark, Richard (MPCA) [mailto:richard.clark@state.mn.us]
Sent: Monday, March 24, 2014 9:49 AM

To: McKim, Krista

Subject: RE: Cliffs Erie Parameters of Concern write-up

Hi. I didn't include the PolyMet data in the spreadsheet because:

- (a) as the write-up says: "The screening process focused primarily on the monitoring data submitted as part of the Cliffs Erie permit application (including supplemental data) and on the routine permit-require and voluntary monitoring conducted by Cliffs Erie. Monitoring data collected by PolyMet in support of the NorthMet EIS process, including both groundwater data from tailings basin wells and surface water data from the tributary creeks, was used to 'check' and validate the screening results to be sure that parameters were not missed for the formal determination of Reasonable Potential by MPCA Effluent Limits staff"; and,
- (b) the PolyMet is available in the Data Packages that are part of the PolyMet record and that we all have.

The SOC data is not included because (a) again, we did not focus on it, (b) limited locations and durations, and (c) instead, used it as more of a 'check' on the primary CE data.

Regarding AI, it is not surprising that the concentrations in the Embarrass are higher than in the tribs. AI is known to be higher in unaffected surface runoff (occasionally even above WQS) which is the primary source of water to the Embarrass - we see this effect in 'routine' baseline monitoring throughout NE Minnesota - and is known to be lower in TB seepage which is the primary source to the tribs.

Hope this helps

From: McKim, Krista [<mailto:mckim.krista@epa.gov>]

Sent: Monday, March 24, 2014 9:34 AM

To: Clark, Richard (MPCA)

Cc: Ackerman, Mark

Subject: RE: Cliffs Erie Parameters of Concern write-up

Hi Richard,

The spreadsheet attached here doesn't seem to include all of the data described in the writeup. Is the rest of the data in a different spreadsheet, or am I missing something here? Specifically the spreadsheet does not include the data collected by Polymet and it is unclear if the SOC required data are included or not.

Also, looking at AI data collected during the polymet effort, it seems that these concentrations are higher in the Embarrass than in the tribs. Did you look at that? I haven't looked at this for other parameters yet but this caught my eye.

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From: Clark, Richard (MPCA) [<mailto:richard.clark@state.mn.us>]

Sent: Friday, February 21, 2014 1:00 PM

To: McKim, Krista

Subject: Cliffs Erie Parameters of Concern write-up

Hi Krista,

Here is the write-up on the Cliffs Erie Parameters of Concern. It would probably help if you kind of combined this with the spreadsheet I sent back in November (attached here as well.)

Please feel free to call with any questions. Thanks!

Richard
651-757-2280